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| <p>(21) International Application Number: PCT/EP00/00357</p> <p>(22) International Filing Date: 13 January 2000 (13.01.00)</p> <p>(30) Priority Data: 9900904.5 16 January 1999 (16.01.99) GB</p> <p>(71) Applicant (for all designated States except CA FR US): SOF-ITECH N.V. [BE/BE]; Rue de Stalle 142, B-1180 Brussels (BE).</p> <p>(71) Applicant (for CA only): SCHLUMBERGER CANADA LIMITED [CA/CA]; 24th Floor, Monenco Place, 801 6th Avenue, S.W., Calgary, Alberta T2P 3W2 (CA).</p> <p>(71) Applicant (for FR only): COMPAGNIE DES SERVICES DOWELL SCHLUMBERGER [FR/FR]; 50, avenue Jean-Jaurès, F-92541 Montrouge (FR).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): SAWDON, Christopher [GB/GB]; 6 Southview Road Biscovey, Par, Cornwall PL24 2HJ (GB). TEHRANI, Mostafa [GB/GB]; 41 Trenance Road, St. Austell, Cornwall PL25 5AL (GB). CRADDOCK, Paul [GB/GB]; 193 Creak-A-Vose Park, St Stephen, St Austell, Cornwall PL26 7ND (GB). LAWSON, Anthony</p> | | <p>[GB/GB]; 7 Menabilly Road, St Austell, Cornwall PL25 4DY (GB).</p> <p>(74) Agent: MENES, Catherine; Etudes et Productions Schlumberger, Division Dowell, 26, rue de la Cavée, BP 202, F-92142 Clamart Cedex (FR).</p> <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published Without international search report and to be republished upon receipt of that report.</p> |
| <p>(54) Title: ELECTRICALLY CONDUCTIVE NON-AQUEOUS WELLBORE FLUIDS</p> <p>(57) Abstract</p> <p>A wellbore fluid having a non-aqueous continuous liquid phase that exhibits an electrical conductivity increased by a factor in order of 10^4 to 10^7 compared to conventional invert emulsion comprises from about 0.2 % to about 10 % by volume of carbon black particles, and one or more emulsifying surfactant(s) selected from the class including: nonionic emulsifiers of Hydrophilic-Lipophilic Balance (HLB) less than about 12, and anionic surfactants wherein the counter-ion (cation) is any of alkali metal, ammonium, or hydrogen ions. This wellbore fluid can be used for drilling or completing a well and can be used for providing enhanced information from electrical logging tools, measurement while drilling, logging while drilling, geosteering and the like.</p> | | |